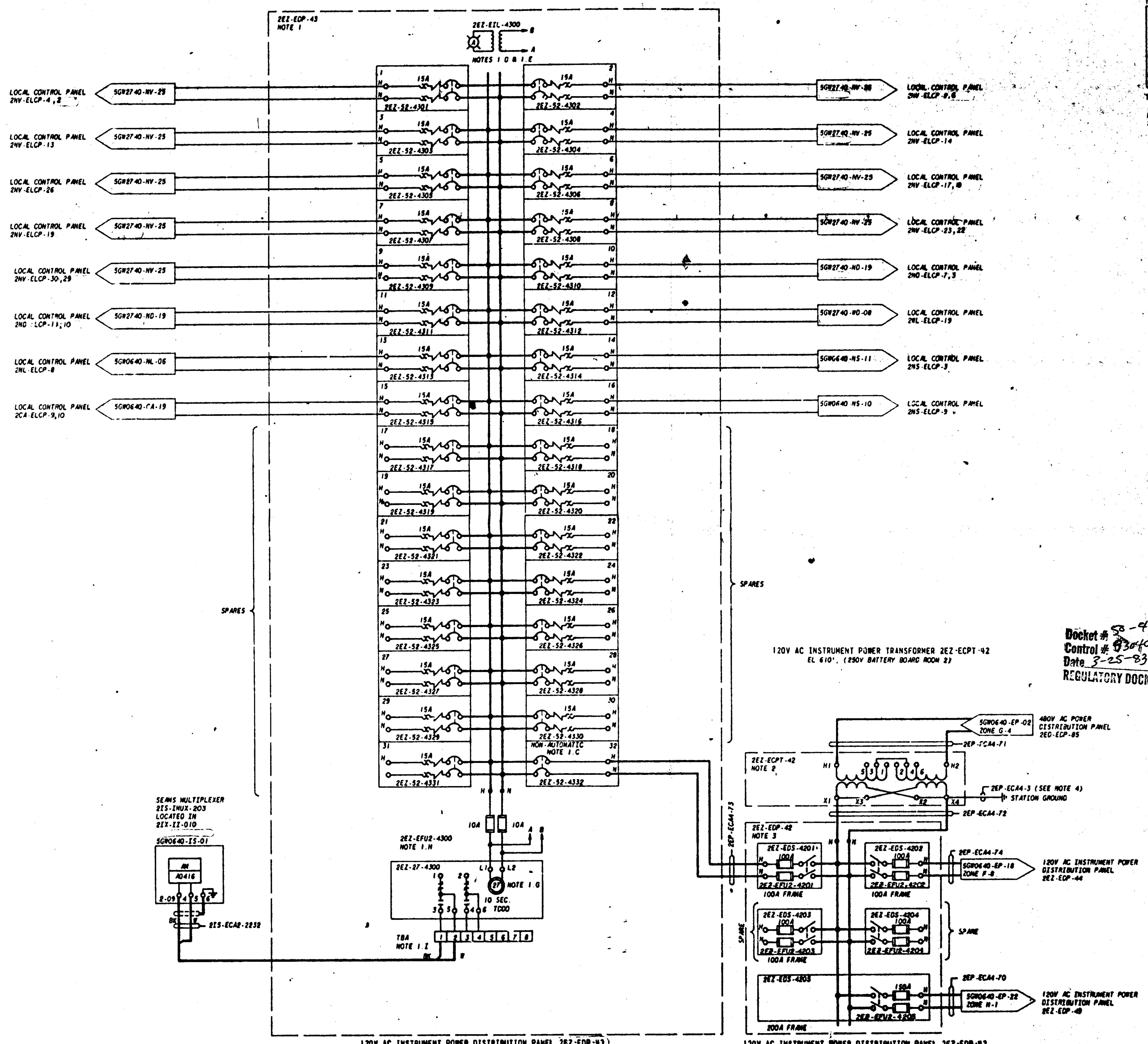

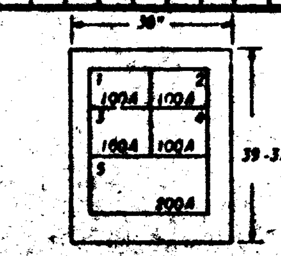

PLAN VIEW "A"
120V AC DISTR PWR DISTRIBUTION PANEL 2EZ-EDP-42

NOTES:

1. 120V AC INSTRUMENT POWER DISTRIBUTION PANEL 2EZ-EDP-43
   A. PANEL IS PROVIDED ON CONTRACT NO 78K4-823705
   B. PANELBOARD IS 100 AMPERE FRAME, 10,000 AMPERE-RMS SYMMETRICAL SHORT CIRCUIT CAPACITY AT 240V AC WITH NEMA ENCLOSURE SIMILAR TO WESTINGHOUSE TYPE #FB OR EQUAL.
   C. THE MAIN CIRCUIT BREAKER IS 100 AMPERE FRAME, NON-AUTOMATIC, 2 POLE, 600V AC HAVING MINIMUM WITHSTAND CURRENT RATING OF I^2T = 1x10⁶ FOR DURATION LESS THAN .0167 SECONDS, 2980 AMPS FOR DURATION LESS THAN .167 SECONDS AND 2000 AMPS FOR DURATION LESS THAN 1 SECOND. WESTINGHOUSE TYPE FB OR EQUAL.
   D. PANEL ENERGIZED INDICATOR IS A TRANSFORMER TYPE LIGHT UNIT WITH AN AMBER LENS, CUTLER-HAMMER 10250T181C9 OR EQUAL.
   E. ANNUNCIATING AND INDICATING WIRE IS 16 AWG, SINGLE CONDUCTOR, TEFZEL INSULATED.
   F. BRANCH CIRCUIT BREAKERS ARE TRIP RATED AS SHOWN ON THE SCHEMATIC, 100 AMP FRAME, 10,000 AMPERE-RMS SYMMETRICAL INTERRUPTING CAPACITY AT 240V AC, 2 POLE WESTINGHOUSE TYPE FB OR EQUAL.
   G. THE UNDERVOLTAGE RELAY SENSES AN ABSENCE OF VOLTAGE AND PROVIDES CONTACT OPENING DELAYED BY 10 SECONDS, SET BY FIELD AND DOES NOT OPEN IF VOLTAGE IS REAPPLIED PRIOR TO THE END OF THE 10 SECOND DELAY. 120V AC, 60HZ, 2PDT SWITCH. AGASTAT 7000 SERIES OFF-DELAY, MODEL NO. 7022AC OR EQUAL.
   H. THE 10 AMPERE FUSES FOR INDICATING LAMP AND TIME DELAY RELAY ARE BUSSMAN FUSETRON FRN OR EQUAL. WIRES SUPPLING FUSES SHALL BE AS SHORT AS POSSIBLE AND EACH WIRE ISOLATED FROM ALL OTHER WIRES.
   I. TBA IS 8 POINT, 30 AMP, SCREW TYPE, 600V, BUCHANAN 0721 OR EQUAL.
   J. PANEL ACCESS TO BE ADMINISTRATIVELY CONTROLLED. (PANEL DOOR LOCKED WITH ALL BREAKERS OPEN DURING NORMAL OPERATIONS.)
2. 120V AC INSTRUMENT POWER TRANSFORMER 2EZ-ECPT-42
   A. TRANSFORMER IS PROVIDED ON CONTRACT NO. 78K13-822814.
   B. DRY TYPE TRANSFORMER, 240x480-120/240 VOLTS, 1Ø, 60HZ, 25KVA, 150°C. TEMPERATURE RISE WITH TWO 2-1/2% FCAN AND TWO 2-1/2% FCBN TAPS. HEAVY-DUTY TYPE 5SH25 OR EQUAL.
3. 120V AC INSTRUMENT POWER DISTRIBUTION PANEL 2EZ-EDP-42.
   A. PANEL IS PROVIDED ON CONTRACT NO. 77K6-821751
   B. PANEL IS DESIGNED FOR 400 AMP SERVICE, SHORT CIRCUIT CAPACITY OF 200,000 RMS SYMMETRICAL AMPS WESTINGHOUSE TYPE FCP OR EQUAL. SEE PLAN VIEW "A"
   C. PANEL CONTAINS THE FOLLOWING:
      TWO TWIN UNIT (100A/100A FRAME), 2 POLE FUSIBLE SWITCHES, INTERRUPTING CAPACITY OF 200,000 RMS SYMMETRICAL AMPS WESTINGHOUSE CAT. NO FCPT-2233 OR EQUAL.
      ONE 200 AMP FRAME, 2 POLE FUSIBLE SWITCH, INTERRUPTING CAPACITY OF 200,000 RMS SYMMETRICAL AMPS WESTINGHOUSE CAT. NO FCP5224 OR EQUAL.
   D. FUSES ARE STANDARD NEC, CHASE-SHAWMUT CLASS K-5 AND SIZED AS SHOWN.
4. 120V AC INSTRUMENT TRANSFORMER HAS SINGLE POINT GROUND IN 250V BATTERY BOARD ROOM. SEE 5GW0640-EP-05 FOR DETAILS.

Docket # 50-483
Control # 8304050536
Date 3-25-83 of Document
REGULATORY DOCKET FILE

PR APERTURE CARD

3	1140	6-3-81	ADDED PANEL UNID'S. REMOVED LOCATIONS.
2	S1	6-27-79	REDRAWN, ADDED LOADS, CABLE NUMBERS AND MONITORING POINT.
1	S1	1-18-78	ADDED SPARE FUSED DISCONNECT. MINOR CORRECTIONS.
REV. NO.	ECN NO.	DATE	

DSGN R.E. HEARN
DRWN R.E. HEARN
CHKD C.G. PETERSON
SUPV J.E. COUNTISS
ENGINEER M.W. STEVENSON by ECM

SCALE: NTS EXCEPT AS NOTED

UNITS 1&2

SCHEMATIC DIAGRAM 250V NORMAL DC POWER DISTRIBUTION SYSTEM

BELLEFONTE NUCLEAR PLANT
TENNESSEE VALLEY AUTHORITY
DIVISION OF ENGINEERING DESIGN

N

SUBMITTED | RECOMMENDED | APPROVED

INSPECTED AND APPROVED FOR ISSUE

KNOXVILLE 9-14-77 88 E 5GW0640-EP-16 R3

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